

Important information for parents about how to prepare your scout for any merit badge program at Ellanor C. Lawrence Park!



Be sure that you are familiar with the requirements for the merit badge your scout has selected. Some badges can be very demanding and may take considerable time and planning to complete. Some badges are not appropriate for younger scouts.

Most Merit Badges are not designed to be completed in a single session with an instructor, so it is not always possible to walk away with a completed and signed blue card at the end a program. Every badge requires some independent work by your scout. We call this “pre-work” because, if these requirements are performed **prior** to our program, we can complete and sign the merit badge card. Otherwise we will sign partial cards at the completion of our program and will have qualified counselors review assignments on an individual basis at a later date. Note you will have to contact and schedule an appointment with an appropriate staff member to do this. Not all staff members are qualified for all badges.

Merit badges are also supposed to be done with the buddy system. ***We strongly recommend that parents attend the program with your scout especially if he does not have a buddy.*** There is never a fee for adults and you are sure to learn something. The program will not proceed if there are not 2 or more adults present, especially for programs that include hikes. We will attempt to enlist adult volunteers from our center but this is not always possible so ***prepare for the possibility that you may have to stay for the program and not just drop off your scout.*** This will allow the instructor to concentrate more fully on the difficult task of imparting all the required information and assisting the boys individually if necessary, while other adults keep the atmosphere calm and productive.

Be sure your scout is dressed appropriately for being outdoors for some or all of the program time. Packing water and snacks is wise for long programs and programs scheduled in hot weather months.

Lastly, obtaining copies of the scout resource booklet for the merit badge can help prepare your scout working with his counselor and for completing any independent study. Books for the badges can be ordered at your local scouting store or at www.scoutstuff.org.

Thank you! And best wishes for success to your scout.

REPTILE & AMPHIBIAN MERIT BADGE



BE PREPARED: The Reptile & Amphibian Merit Badge session is two hours long and covers *a lot* of material. It also requires three months of recorded observation of a reptile or amphibian, or one month care and recorded observations of a reptile or amphibian. If you have a pet reptile or amphibian already, then the one month of care is a simple option for you. PLEASE do NOT go out and purchase a pet reptile or amphibian just to complete the badge! Pet ownership is always a long-term commitment for the life of your pet and should only be undertaken after careful consideration. Ellanor C. Lawrence is a nature center and has live reptiles and amphibians on display. Scouts are welcome to come here on a regular basis over three months and record their observations of one of our animals. Or you may make observations at a nature center, zoo, pet store, or other similar center near your home. NO animal may be taken from any Fairfax County park (except fish). Outside the park, collecting animals from the wild requires a state permit.

PRE-WORK:

- Please read the badge requirements carefully (see below) Any reading or research you can do on these topics before we meet will help to speed your completion of the workbook and the badge.
- Complete a record of observations of a reptile or amphibian as specified in 8 a. or 8 b.
- To complete requirement 9, option b, use a field guide and/or the Virginia Herpetology Society website, familiarize yourself with the appearance of the following eight local species: eastern black rat snake, eastern garter snake, northern water snake, eastern box turtle, eastern painted turtle, snapping turtle, American bullfrog, green frog, red-backed salamander.
(<http://www.virginiaherpetologicalsociety.com/>)
- We will complete requirement 9, option b in the classroom because frogs are not out in cold weather months. But, if you are anticipating taking this program months in advance or in the warm weather months after the program, please use the listed resources regarding frog song and spend an evening listening to the gray tree frogs, green frogs, and bull frogs that are frequently heard by Walney Pond.

REPTILE & AMPHIBIAN MERIT BADGE



Requirements

1. Describe the identifying characteristics of six species of reptiles and four species of amphibians found in the United States. For any four of these, make sketches from your own observations or take photographs. Show markings, color patterns, or other characteristics that are important in the identification of each of the four species. Discuss the habits and habitats of all 10 species.
2. Discuss with your merit badge counselor the approximate number of species and general geographic distribution of reptiles and amphibians in the United States. Prepare a list of the most common species found in your local area or state.
3. Describe the main differences between
 - a. Amphibians and reptiles
 - b. Alligators and crocodiles
 - c. Toads and frogs
 - d. Salamanders and lizards
 - e. Snakes and lizards
4. Explain how reptiles and amphibians are an important component of the natural environment. List four species that are officially protected by the federal government or by the state you live in, and tell why each is protected. List three species of reptiles and three species of amphibians found in your local area that are not protected. Discuss the food habits of all 10 species.
5. Describe how reptiles and amphibians reproduce.
6. From observation, describe how snakes move forward. Describe the functions of the muscles, ribs, and belly plates.
7. Describe in detail six venomous snakes and the one venomous lizard found in the United States. Describe their habits and geographic range. Tell what you should do in case of a bite by a venomous species.
8. *Do ONE of the following:*
 - a. *Maintain one or more reptiles or amphibians for at least a month. Record food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders).*
 - b. *Choose a reptile or amphibian that you can observe at a local zoo, aquarium, nature center, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human-caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor.*

REPTILE & AMPHIBIAN MERIT BADGE



9. Do TWO of the following:

- a. **Identify at night three kinds of toads or frogs by their voices. Imitate the song of each for your counselor. Stalk each with a flashlight and discover how each sings and from where.**
- b. **Identify by sight eight species of reptiles or amphibians.**
- c. Using visual aids, give a brief talk to a small group on three different reptiles and amphibians.

10. Tell five superstitions or false beliefs about reptiles and amphibians and give a correct explanation for each. Give seven examples of unusual behavior or other true facts about reptiles and amphibians.

NOTE: Scouts must not use venomous reptiles in fulfilling requirement 8a. Species listed by federal or state law as endangered, protected, or threatened must not be used as live specimens in completing requirement 8a unless official permission has been given. In most cases, all specimens should be returned to the wild at the location of capture after the requirement has been met. Check with your merit badge counselor for those instances where the return of these specimens would not be appropriate.

Under the Endangered Species Act of 1973, some plants and animals are, or may be, protected by federal law. The same ones and/or others may be protected by state law. Be sure that you do not collect protected species. Your state may require that you purchase and carry a license to collect certain species. Check with the wildlife and fish and game officials in your state regarding species regulations before you begin to collect.

Resources

Field Guides to North American Reptiles and Amphibians

- Behler, John L., and F. Wayne King. *The Audubon Society Field Guide to North American Reptiles and Amphibians*. Knopf, 1988.
- Conant, Roger, and Joseph T. Collins. *A Field Guide to Reptiles and Amphibians of Eastern and Central North America*. Houghton Mifflin, 1991.
- Smith, Hobart M., and Edmund D. Brodie Jr. *A Guide to Field Identification: Reptiles of North America*. Golden, 1982.
- Stebbins, Robert C. *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin, 1985.
- Tynning, Thomas F. *Stokes Guide to Amphibians and Reptiles*. Little, Brown, 1990.

Natural History Guides

- Bishop, Sherman C. *Handbook of Salamanders*. Comstock, 1967.
- Ernst, Carl H. *Venomous Reptiles of North America*. Smithsonian Institution, 1992.
- Ernst, Carl H., George R. Zug, and Molly Dwyer Griffin. *Snakes in Question: The Smithsonian Answer Book*. Smithsonian, 1996.
- Ernst, Carl H., and Roger W. Barbour. *Snakes of Eastern North America*. George Mason University, 1989.
- Ernst, Carl H., Roger W. Barbour, and Jeffery E. Lovich. *Turtles of the United States and Canada*. Smithsonian, 1994.
- Greene, Harry W. *Snakes: The Evolution of Mystery in Nature*. University of California Press, 1997.
- Hofrichter, Robert. *Amphibians: The World of Frogs, Toads, Salamanders and Newts*. Firefly Books, 2000.
- Ross, Charles A. *Crocodiles and Alligators*. Facts on File, 1989.

Caring for Reptiles and Amphibians in Captivity

- Frye, Fredric L. *A Practical Guide for Feeding Captive Reptiles*. Krieger Publishing, 1991.
- Mattison, Christopher. *The Care of Reptiles and Amphibians in Captivity*. Blandford Press, 1987.
- Rossi, John V. *Snakes of the United States and Canada: Keeping Them Healthy in Captivity*. Krieger, 1992.

Sounds of Frogs and Toads

These are records or tapes of the calls of a great many of our native frogs and toads. They can be ordered through the following addresses or Web sites.



- Bogert, Charles M. *Sounds of North American Frogs: The Biological Significance of Voice in Frogs*. Folkways Cassette Series: 06166, 1958. Office of Folklife Programs, 955 L'Enfant Plaza 2600, Smithsonian Institution, Washington, DC 20560.
- Elliott, Lang. *The Calls of Frogs and Toads*. NatureSound Studio. Web site: <http://www.naturesound.com>
- Kellogg, Peter P., and Arthur A. Allen. *Voices of the Night*. Library of Natural Sounds, 1982. Cornwell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850.
- *Sounds of North American Frogs*. Smithsonian Folkways. Web site: <http://www.folkway.si.edu>

Organizations and Web Sites

Ellanor C. Lawrence Park

Www.fairfaxcounty.gov/parks/ecl

Virginia Herpetological Society

<http://www.virginiaherpetologicalsociety.com/>

Virginia Game & Wildlife

American Museum of Natural History

Web site: <http://www.amnh.org>

The American Zoo and Aquarium Association

Web site: <http://www.aza.org>

National Geographic Society

Web site: <http://www.nationalgeographic.com>

National Fish and Wildlife Foundation

Web site: <http://www.nfwf.org>

National Wildlife Federation

Web site: <http://www.nwf.org>

U.S. Fish and Wildlife Service

Web site: <http://www.fws.gov>